



PATENT
0459-0702P

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: Niels J. BJERRUM et al. Conf.: 7042
Appl. No.: 10/070,558 Group: 1745
Filed: May 6, 2002 Examiner: A.J. MARTIN
For: POLYMER ELECTROLYTE MEMBRANE FUEL CELL

INFORMATION DISCLOSURE STATEMENT
(SUBMISSION AFTER FILING OF AN APPLICATION
BUT BEFORE FINAL REJECTION OR NOTICE OF ALLOWANCE
OR CONCURRENTLY WITH A RULE 1.114 RCE APPLICATION)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

January 11, 2005

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

The patents, publications, or other information submitted for consideration by the Office are listed on the PTO-1449(s), attached hereto.

II. COPIES (check at least one box)

- a. ☒ Copies of cited U.S. patents and patent application publications are not included. Copies of foreign patent documents and non-patent literature are included.
- b. ☐ Some or all of the documents listed on the PTO-1449 are not enclosed because they were cited in the International Search Report and copies should already be in the PTO file. If copies are needed, please contact the undersigned.

III. CONCISE EXPLANATION OF THE RELEVANCE
(check at least one box)

a. ☒ **DOCUMENTS IN THE ENGLISH LANGUAGE**

The patents, publications, or other information listed on the attached PTO 1449 are in the English language and therefore, do not require a statement of relevancy.

b. ☐ **DOCUMENTS NOT IN THE ENGLISH LANGUAGE**

A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:

c. ☐ **ENGLISH LANGUAGE SEARCH REPORT**

An English language version of the search report or action that indicates the degree of relevance found by the foreign office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(III)(A)(3).

d. ☐ **OTHER**

The following additional information is provided for the Examiner's consideration.

FEES

IV. ☐ THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(b):
(check one box)

- a. ☐ within three months of the filing date of a national application (37 C.F.R. § 1.97(b)(1)). No fee or statement is required. *(This section is not to be used with RCE's.)*
- b. ☐ within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or statement is required.
- c. ☐ concurrently with the filing of a Request for Continued Examination under § 1.114 (37 C.F.R. § 1.97(b)(4)). No fee or statement is required.
- d. ☐ before the mailing date of a first Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or statement is required.
In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the statement under 37 C.F.R. § 1.97(e) below, or, if no statement has been made, charge our deposit account in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).

V. ☒ THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(c):
(check one box)

before the mailing date of a Final Office Action under 37 C.F.R. § 1.113 (See 37 C.F.R. § 1.97(c)(1)) or before the mailing date of a Notice of Allowance under 37 C.F.R. § 1.311 (See 37 C.F.R. § 1.97(c)(2)).

- a. ☒ No statement; therefore, a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).
- or
- b. ☐ See the statement below. No fee is required.

VI. STATEMENT UNDER 37 C.F.R. § 1.97(e) (check only one box)

The undersigned hereby states that

- a. ☐ each item of information contained in the IDS was first cited in any communication from a foreign Patent Office in a counterpart foreign application not more than 30 days prior to the filing of this IDS; or
- b. ☐ each item of information contained in the IDS was first cited in any communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS; or
- c. ☐ no item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of the IDS.
- d. ☐ Some of the items of information were cited in a communication from a foreign Patent Office. As to this information, the undersigned states that each item of information contained in the IDS was first cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby states that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application and, to the best of my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this statement.

VII. PAYMENT OF FEES (check one box)

- ☒ A check in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p) is enclosed for the above-identified fee.
- ☐ Please charge Deposit Account No. 02-2448 in the amount required by 37 C.F.R. § 1.17(p) for the above-indicated fee. This paper is submitted in triplicate.
- ☐ No fee is required.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule and charge the appropriate fee to Deposit Account No. 02-2448.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Respectfully submitted,

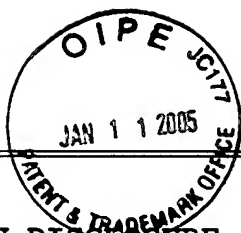
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KM/mlr
0459-0702P

Attachment(s): ☒ PTO-1449
☒ Documents
☐ Foreign Search Report
☐ Fee
☐ Other:



Form PTO-1449		ATTY. DOCKET NO. 0459-0702P		APPLICATION NO. 10/070,558			
INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)				APPLICANT Niels J. BJERRUM et al.			
				FILING DATE May 6, 2002			
GROUP 1745							
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NUMBER	Kind	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	US 5,091,087	A	1992-02-25	CALUNDANN et al.			
	US 4,814,399		1989-03-21	SANSONE et al.			
	US 5,525,436	A	1996-06-11	SAVINELL et al.			
	US 5,716,727	A	1998-02-10	SAVINELL et al.			
	US 5,688,613	A	1997-11-18	LI et al.			
FOREIGN PATENT DOCUMENTS							
Office	DOCUMENT NUMBER	Kind	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION
							YES NO
OTHER DOCUMENTS (Include Name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.)							
	Performance Study of a Fuel Cell Pt-on-C Anode in Presence of CO and CO ₂ , and Calculation of Adsorption Parameters for CO Poisoning, by H.P. Dhar et al., Energy Research Corporation, Vol. 133, No. 8, August 1986, pp. 1574-1582						
	Nature of CO Adsorption during H ₂ Oxidation in Relation to Modeling for CO Poisoning of a Fuel Cell Anode, by H.P. Dhar et al., Journal of Electrochemical Society, Vol. 134, No. 12, December 1987, pp. 3021-3026.						
	Acid-Doped Polybenzimidazoles: A New Polymer Electrolyte, by J.S. Wainright, et al, Journal of Electrochemical Society, Vol. 142, No. 7, July 1995, pp. L121-L123.						
	Real-Time Mass Spectrometric Study of the Methanol Crossover in a Direct Methanol Fuel Cell, by J.-T. Wang et al., Journal of Electrochemical Society, Vol. 143, No. 4, April 1996, pp. 1233-1239.						
	Thermal Stability of Proton Conducting Acid Doped Polybenzimidazole in Simulated Fuel Cell Environments, by S.R. Samms et al., Journal of Electrochemical Society, Vol. 143, No. 4, April 1996, pp. 1225-1232.						
	Electro-osmotic Drag Coefficient of Water and Methanol in Polymer Electrolytes at Elevated Temperatures, by D. Weng et al., Journal of Electrochemical Society, Vol. 143, No. 4, April 1996, pp. 1260-1263.						
	Kinetics of O ₂ Reduction on a Pt Electrode Covered with a Thin Film of Solid Polymer Electrolyte, by S.K. Zecevic et al., Journal of Electrochemical Society, Vol. 144, No. 9, Sept. 1997, pp. 2973-2982.						
	Formic Acid Oxidation in a Polymer Electrolyte Fuel Cell, A Real-Time Mass-Spectrometry Study, by M. Weber et al., Journal of Electrochemical Society, Vol. 143, No. 7, April 1996, pp. L158-L160.						
	Acid-Doped Polybenzimidazole as the Membrane of Electrochemical Hydrogen Sensors, by R. Bouchet et al., Journal of Electrochemical Society, Vol. 144, No. 5, May 1997, pp. L95-L97.						
EXAMINER				DATE CONSIDERED			
EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.S.P. 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							